

## **REMARKS**

The Office Action mailed July 20, 2007, has been reviewed and these remarks are responsive thereto. Claims 1-30 remain pending in this application and currently stand rejected. Claims 1, 8, 14, 19-22, 24, 25, 27, and 28 have been amended. Claims 13 and 26 have been cancelled without prejudice or disclaimer. No new matter is added by the amendments.

### ***Interview Summary***

An interview was held between the Examiner and the Applicants' attorney on October 11, 2007. The Examiner agreed that the amendments appear to overcome the cited references. However, a decision will be made upon in-depth examination of the amended claims following the submittal of this response.

### ***Claim Rejections Under 35 U.S.C. §103***

The Office Action rejected claims 1-3, 5, 8-13, 15-17, and 19 under 35 U.S.C. 103(a) as being unpatentable over Yamakita (US 5,956,681) in view of Szabo (US 6,868,525), and further in view of Butler et al. (US 7,082,392). Applicant respectfully traverses the rejections.

Amended claim 1 recites a computer system for applying mode bias to an input field of an electronic document of an application that includes a mark-up language schema registry configured to receive a schema name based on a hierarchical analysis of a textual input to the input field from the application, locate a grammar with a language setting, a locale setting and associated with the schema name, and send the grammar to an input engine in communication with the registry. According to claim 1, the grammar defines an appropriate input for the input field and each mark-up language schema is associated with a grammar by referring to the grammar directly, mapping to the grammar, or encoding the grammar within the schema. The amendments are supported by the Specification (*See* Specification: page 7, lines 20-24; page 9, lines 4-14; page 9, lines 15-25; and page 10, lines 1-5).

*Yamakita* discloses a communication environment using a mobile terminal, a speech recognition function as a user interface of the mobile terminal at a practical accuracy and cost and to enable generation/transmission of an E-mail or FAX document as formatted text data on the basis of the recognition result. (*See Yamakita* column 2, lines 18-23.) *Yamakita* also

discloses a formatted text generation section that determines a field of the recognized speech text data output from a text speech recognition section using a format type data which is designated from a mobile terminal together with a text speech recognition/formatting start request command, and a format type field dictionary. (See *Yamakita* column 5, lines 34-40.) In addition, *Yamakita* discloses a packet transmission/reception section (FIG. 1) in a speech control host unit recognizes a value set in a "destination port number" field of a TCP header of a received TCP segment, thereby determining an application executed by the speech control host unit as a transfer destination of data stored in the "data" field of the TCP segment. (See *Yamakita* column 16, lines 22-28.)

Thus, *Yamakita* fails to disclose most, if any, of the elements of Applicant's amended claim 1. For example, the table described in FIG. 10 of *Yamakita* is a processing terminal registration table with entries for transmission source IP address, access time, etc. This is not even close to the mark-up language schema registry recited in claim 1. *Yamakita* further fails to disclose receiving a schema name based on a hierarchical analysis of a textual input to the input field from the application, locating a grammar with a language setting, a locale setting and associated with the schema name, where the grammar defines an appropriate input for the input field. *Yamakita* certainly does not teach or suggest each mark-up language schema being associated with a grammar by referring to the grammar directly, mapping to the grammar, or encoding the grammar within the schema.

In contrast to amended claim 1, *Yamakita* merely recognizes keywords recited in different languages by a user, and does not utilize either a language setting or a locale setting. (See *Yamakita* column 35, lines 43-64.) Moreover, *Yamakita* fails to teach a grammar and merely recognizes words as text data and is responsive to a keyword. (See *Yamakita* column 5, lines 34-40.) Some of these deficiencies are admitted by the Office Action.

*Szabo* discloses an improved human user computer interface system providing a graphic representation of a hierarchy populated with naturally classified objects with distinct classification and a personal services infrastructure which unifies the visual environment through the use of stylized taxonomic trees and timelines ("maps"). (See *Szabo* Abstract, column 17, lines 41-44.) *Szabo* also discloses using a user hierarchal schema having documents for

providing similar or related information classified together, wherein this similarity or relatedness is not defined intrinsically in the query. (See *Szabo* column 21, lines 38-45.)

First, one skilled in the art would not have any incentive to combine *Szabo* and *Yamakita* to arrive at the present application. The two cited references are directed to completely different subject matters. Second, even if one were to combine *Szabo* with *Yamakita*, the cited art still fails to remedy all the disclosed deficiencies in *Yamakita*.

The Office Action further relies on *Butler* to remedy the deficiencies of *Yamakita* and *Szabo*. *Butler* describes an interactive voice response system with a plurality of speech technology modules and dynamically determining which of the plurality of speech technology modules are to be used during interaction between the system and a user (See *Butler* Abstract, column 1, lines 8-12). However, *Butler*, individually or in combination with the other cited references, also fails to teach or suggest several features of amended claim 1.

The features patentably distinct from the combination of the three references include at least a mark-up language schema registry configured to receive a schema name based on a hierarchical analysis of a textual input to the input field from the application, locate a grammar with a language setting, a locale setting and associated with the schema name, and send the grammar to an input engine in communication with the registry. The grammar defining an appropriate input for the input field and each mark-up language schema being associated with a grammar by referring to the grammar directly, mapping to the grammar, or encoding the grammar within the schema are also not disclosed or hinted at by the cited references. Therefore, amended claim 1 is in condition for allowance. Notice to that effect is respectfully requested.

Claims 2-3, 5, 8-12, 15-17, and 19 depend from independent claim 1 with additional features. Therefore, claims 2-3, 5, 8-12, 15-17, and 19 are also allowable for at least the same reasons as discussed above for amended claim 1. Claim 13 has been cancelled without prejudice or disclaimer.

Claims 4, 6, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Yamakita* in view of *Szabo*, in view of *Butler*, as applied to claim 1 above, and further in view of *Fisher* (US 2001/0041328).

As discussed above, *Yamakita*, *Szabo*, and *Butler* fail to teach or suggest several features of amended independent claim 1. *Fisher* discloses a computer simulation process, apparatus, and

multimedia game intended for simulated, foreign travel experiences and simulated, foreign language environments (See *Fisher* paragraph [0004]). *Fisher* discloses that the simulator produces a user-character dialogue simulation by digitizing video or transferring digital video content to a computer system, which is suitable for digital video editing and image editing (See *Fisher* paragraph [0036]). *Fisher* also discloses that the simulator produces a user-character dialogue simulation by segmenting the video according to content, which is based on semantic structures, grammar, gestures, and other features of communication (See *Fisher* paragraph [0036]). Thus, *Fisher* fails to remedy the deficiencies of the three cited references in making claim 1 obvious. Claims 4, 6, and 7 depend from claim 1 with additional features. Therefore, claims 4, 6, and 7 are also allowable for at least the same reasons as discussed above for claim 1.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Yamakita* in view of *Szabo*, in view of *Butler*, as applied to claim 1 above, and further in view of *De La Huerga* (US 6,434,567).

As discussed above, *Yamakita*, *Szabo*, and *Butler* fail to teach or suggest several features of amended independent claim 1. *De La Huerga* discloses a system including predefined address format fields and corresponding instantiation rule sets which can be used to quickly define address formats for use by an enterprise computing system. (See *De La Huerga* column 6, lines 45-49.) *De La Huerga* also discloses a system in which address formats can be specified once for all processing devices (e.g. databases, servers, applications, data collection devices, etc.). (See *De La Huerga* column 6, lines 49-52.) However, *De La Huerga* also fails to remedy the deficiencies of the three cited references in making claim 1 obvious. Claim 14 depends from claim 1 with additional features. Therefore, claim 14 is also allowable for at least the same reasons as discussed above for claim 1.

The Office Action rejected claim 18 under 35 U.S.C. § 103(a) as being unpatentable over *Yamakita* in view of U.S. Patent No. 5,895,461 to *De La Huerga* (hereinafter *De La Huerga* '461). Applicant respectfully traverse this rejection as well.

As mentioned above, the combination of *Yamakita*, *Szabo*, and *Butler* fail to teach or suggest all the limitations of claim 1. Accordingly, dependent Claim 18 is also allowable over the combination of *Yamakita*, *Szabo*, and *Butler* at least for the reasons described above regarding independent claim 1 and by virtue of its dependency upon independent claim.

*De La Huerga '461* discloses a specialized word processor for accepting and recognizing keywords input by the creator of a data record and storing the record at a predetermined location which will be referenced by a hypertext link associated with the keywords. (See *De La Huerga '461* column 6, lines 33-39.) *De La Huerga '461* also discloses that the specialized word processor checks the format of data for the proper length and corrects characters input by a user. See *De La Huerga '461* column 6, lines 50-55.) Thus, *De La Huerga '461* in combination with the other three references does not teach or suggest independent claim 1 or its dependent claim 18.

Claim 20-22, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Yamakita* in view of *Szabo*. Applicant respectfully traverses the rejection.

Amended claim 20 recites a computer system for applying mode bias to an input field of an electronic document of an application that includes a mark-up language schema registry in communication with the application and an input engine, where the registry is operable to point to code for dynamically generating one or more grammars used to define an appropriate input for the input field. According to claim 20, the registry receives a schema name from the application, locates an identifier of a grammar associated with the schema name, and sends the identifier of the grammar to the input engine. Each mark-up schema in the registry is associated with a grammar by referring to the grammar directly, mapping to the grammar, or encoding the grammar within the schema.

Thus, amended claim 20 includes elements similar to the features of claim 1, which as described above is not made obvious by *Yamakita* in view of *Szabo* and *Butler*. Therefore, amended claim 20 is also not taught or suggested by the combination of *Yamakita* and *Szabo* alone, and is in condition for allowance. Notice to that effect is respectfully requested.

Amended claim 21 recites a computer-implemented method for applying mode bias to an input field of an electronic document of an application program module that includes, *inter alia*, determining a mode bias schema that is attached to the input field where the determination of a mode bias schema uses a ranked list of mode bias schemas, dynamically generating one or more grammars based on the input field and a mark-up language schema registry where the one or more grammars define an appropriate input for the input field, and determining a grammar from the generated one or more grammars that is associated with the mode bias schema.

The actions of the method of amended claim 21 include similar features to the systems of amended claims 1 and 20. Therefore, amended claim 21 is also not rendered obvious by the combination of *Yamakita* and *Szabo*. Furthermore, claims 22, 24, and 25 depend from amended claim 21 with additional features. Thus, claims 21, 22, 24, and 25 are allowable for at least the reasons discussed above. Notice to that effect is respectfully requested. Claim 26 has been cancelled without prejudice or disclaimer.

Claims 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Yamakita* in view of *Szabo*, in view of *Butler*, as applied to claim 1 above, and further in view of *De La Huerga* '461.

As mentioned above, the combination of *Yamakita*, *Szabo*, and *Butler* fail to teach or suggest all the limitations of claim 1 or claim 21. Accordingly, dependent Claim 18 is also allowable over the combination of *Yamakita*, *Szabo*, and *Butler* at least for the reasons described above regarding independent claim 21 and by virtue of its dependency upon independent claim 21. *De La Huerga* '461 fails to disclose any of the essential features of independent claim 21, individually or in combination with the other three references, and thereby dependent claim 23.

Claims 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Yamakita* in view of Bays et al. (US 6,519,603) in further view of *Szabo*.

Claim 27 recites a computer-implemented method for determining a semantic category of a string in an electronic document based upon a mode bias schema that includes actions similar to the method claim 21, such as, dynamically generating one or more grammars based on a received input string where the grammars define an appropriate input for the input field and retrieving a mode bias schema and an associated grammar where the mode bias schema associated with a mark-up language schema registry, and each mark-up language schema in the registry is associated with a grammar by referring to the grammar directly, mapping to the grammar, or encoding the grammar within the schema. The method of amended claim 27 includes additional features like determining whether the input string conforms to the definition of input defined by the grammar, if so, then associating the mode bias schema with the input string in the document, and saving the mode bias schema as a semantic category label in association with the input string.

As discussed previously, the features of method claim 27 that are similar to method claim 21 (and claims 1 and 20) are not taught or suggested by *Yamakita* or *Szabo*, individually or in combination. *Bays* discloses a method and apparatus for capturing annotations about database material in a way that allows queries with conditions or predicates on both the database material and the annotations. (See *Bays* column 2, lines 10-14.) Database material may be text, graphics, spreadsheets, relational tables or any other material which may be stored and indexed. (See *Bays* column 2, lines 14-16.) An annotatable data item (i.e. the subsection of database material that can be annotated) is any entity referenced by an index (e.g. by an object identifier) or any attribute or subcomponent of such an entity, or any arbitrary set of such items. (See *Bays* column 2, lines 16-20.) *Bays* also discloses that annotations may be captured in structured form to enhance queryability and semantic interpretation as well as to provide some order for users to enter this additional information content. (See *Bays* column 2, lines 47-50.).

Even if *Bays* could be combined with *Yamakita* and *Szabo* without the hindsight of the present application, the additional cited reference still does not remedy the deficiencies of *Yamakita* and *Szabo*. Thus, the three references combined (or individually) fail to render claim 27 unpatentable. Claims 28 and 29 depend from amended independent claim 27 with additional features. Thus, claims 27-29 are in condition for allowance over the cited references. Notice to that effect is respectfully requested.

Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Yamakita* in view *Bays*, in view of *Szabo* and further in view of Friedman (US 6,182,029).

As mentioned above, the combination of *Yamakita*, *Szabo*, and *Bays* fail to teach or suggest all the limitations of claim 27. Accordingly, dependent Claim 30 is also allowable over the combination of *Yamakita*, *Szabo*, and *Bays* at least for the reasons described above regarding independent claim 21 and by virtue of its dependency upon independent claim 21. *Friedman* discloses a natural language processing system for extracting information from a natural language document input that can be easily adapted for use in a variety of areas of expertise by modifying, if necessary, one or more corresponding knowledge components. (See *Friedman* column 4, lines 49-53.) *Friedman* also discloses a document tagging schema that uses a document structure based on Extensible Markup Language (XML). (See *Friedman* column 12, lines 21-28.) However, *Friedman* does not teach or suggest the above discussed elements of the

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independent base claim together with the elements of claim 30, individually or in combination with the other three references. Therefore claim 30 is also allowable.

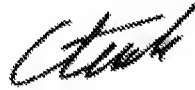


**CONCLUSION**

In view of the foregoing amendments and remarks, Applicants respectfully submits that the present application is in condition for allowance. Reconsideration and reexamination of the application and allowance of the claims at an early date are hereby solicited. If the Examiner has any questions or comments concerning this matter, the Examiner is invited to contact the applicant's undersigned attorney at the number below.

Respectfully submitted,

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